

REMARKS

Reconsideration and allowance in view of the foregoing amendments and the following remarks is respectfully requested.

By this Amendment, Figs. 1 and 2 are amended, the specification is amended, and claims 9 and 14 are amended.

The Patent and Trademark Office (PTO) objects to Figs. 1 and 2 based upon informalities. Figs. 1 and 2 are amended to obviate the objection. Specifically, Figs. 1 and 2 have been designated by the legend, "Prior Art." Accordingly, withdrawal of the objection to the drawings is respectfully requested.

The title of the invention has been objected to as not being descriptive. Applicants have amended the title, as suggested by the Examiner.

Claim 13 is objected to because of informalities. Applicants amend claim 13 to replace "whereinthere" with the phrase "wherein there," as suggested by the Examiner to obviate the objection thereto. Accordingly, withdrawal of the objection to claim 13 is respectfully requested.

Claim 14 is rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants amend claim 14 to eliminate the phrase "that is to say." Accordingly, withdrawal of the 112, second paragraph rejection of claim 14 is respectfully requested.

Rejections under 35 USC §102(e)

The rejection of claims 9 and 11-14 under 35 USC §102(e) as being anticipated by U.S. Patent No. 6,794,654 to Hansen et al. ("Hansen") is respectfully traversed. A rejection based on 35 U.S.C. §102 requires every element of the claim to be included in the reference, either directly or inherently.

Regarding claim 9, notwithstanding the Examiner's assertions that Hansen

discloses a matrix of rows and columns of pixels on a chip with beveled corners, and “a reading register placed at the bottom of the matrix” (emphasis added), Applicants submit that the Examiner fails to specify with clarity where Hansen discloses the recited subject matter. Further, it is not incumbent on the Applicants to assist in formulating the rejection and attempting to decipher which element the rejection holds to be disclosed and how this anticipates the claimed subject matter.

Rejections under the 35 USC § 102 statute, are based on the premise that to anticipate a claim, each and every element of the claim must be shown in a single reference. When a claimed element cannot be found in the reference, the reference does not anticipate the claimed invention. Further, it is incumbent upon the Examiner to identify where in the reference each element may be found. *Ex parte Levy*, 17 U.S.P.Q.2d 1461 (Bd. Pat. App. Infr. 1990). Consequently, when the Examiner fails to identify a claimed element, the Examiner has failed to establish a prima facie case of anticipation. The PTO is therefore respectfully requested to identify, preferably using column and line, where disclosure of the above-mentioned subject matter is to be found.

Nonetheless, Applicants respectfully submit that there is no reading register at the bottom of the matrix in Hansen, and further submit that the Examiner incorrectly interprets Hansen by extending the usual meanings of words far beyond the normal technical meaning. Applicants further submit that the Examiner’s contention that the bus structure of Hansen is a reading register is an inappropriate construction of the expression “reading register”. A set of conductors that lead to a reading register are not normally considered a reading register. The conductors of Hansen, which may lead to a reading register cannot be considered a reading register without depriving the word “reading register” of its usual meaning.

Applicants submit that a reading register in the context of a matrix of photosensitive pixels is a register which stores in parallel signals corresponding to light exposure of several pixels and which, later, serially outputs signals representative of the exposure of those pixels. A reading register, as recited in claim 9, is not explicitly disclosed in Hansen because the purpose of Hansen is not to disclose a reading

register, but rather to describe a geometrical arrangement of multiple hexagonal arrays allowing the formation of a hemispheric global arrangement in the same way as a football is formed of sewn hexagonal pieces. Although a reading register may be present in Hansen, it is cannot be in the detector array chip. Rather, it would be downstream of the flexible connection film that is bonded to the conductor track carrier which is itself bonded to the detector array.

Furthermore, notwithstanding the incorrect characterization of a bus structure as a reading register, the bus structure of Hansen is on a separate board (conductor track carrier) and is not disposed on the chip at the bottom of the matrix, as recited in claim 9.

Furthermore, if one considers the normal meaning of a register stage in a reading register, it is not seen what are the register stages in Hansen which could be situated in the oblique parts alongside the beveled corners, and it is not understood in what respect would the register be bent so as to run alongside the beveled corners of the chip forming a horizontal part and two oblique parts. Rather, the bus structure of Hansen concentrates towards one single side of the hexagon, not towards a horizontal side and two oblique sides. (See Hansen, Figure 3).

Finally, it is clear that there is no structure in Hansen for directing photosensitive charges of columns terminating opposite the beveled corners to register stages situated in the oblique parts of the register. On the contrary, Hansen discloses wherein the signals from pixels situated in columns terminating opposite the beveled corners are directed to the horizontal, non-beveled, side of the matrix, as can be clearly seen in Fig. 3.

Notwithstanding the above argument, claim 9 is amended to more clearly recite the claimed subject matter wherein the reading register is placed on the chip, and wherein a reading register is a register designed for storing in parallel signals representative of exposure of pixels to light and for serially outputting corresponding signals.

Accordingly, because Hansen does not disclose, teach or suggest each and

every limitation recited in amended claim 9, the rejection of claim 9 under 35 U.S.C. §102(e) is improper. Applicants respectfully submit, therefore, that independent claim 9 is patentable over Hansen.

Claims 11-14 depend variously from independent claim 9 and are likewise patentable over Hansen at least for their dependence on claim 9, an allowable base claim, as well as for additional features they recite. Withdrawal of the rejection over Hansen is respectfully requested.

Rejections under 35 USC §103(a)

The rejection of claims 10, 15, and 16 under 35 USC §103(a) as being unpatentable over Hansen by itself, or in view of Carroll (US 6,527,442), is respectfully traversed.

Applicants respectfully submit that, as discussed above, independent claim 9 is patentable over Hansen. The integrated sensor holder of Carroll likewise fails to remedy the deficiencies of Hansen with regards to claim 9.

Therefore, Applicants respectfully submit that the Hansen, singularly, or in combination with Carroll, fails to disclose, teach or suggest all the features recited in claims 10, 15, and 16. Accordingly, claims 10, 15, and 16 are patentable over the asserted references, at least in view of their dependence on claim 9. Withdrawal of the rejection is respectfully requested.

All objections and rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited.

Early issuance of a Notice of Allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

LOWE HAUPTMAN HAM & BERNER, LLP

A handwritten signature in black ink that reads "Kenneth M. Berner". The signature is written in a cursive, flowing style.

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Date: November 2, 2007
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